

## LAKE MANAGEMENT PLAN

*Updated April, 2009 – C. Donley*

### **Water(s): Fishtrap Lake (Spokane/Lincoln Co.)**

**Location:** Fishtrap Lake is Located 6.5 miles northeast of Sprague, WA. Fishtrap Lake is one of two headwater lakes and the largest headwater lake in the Negro Creek Drainage that flows into Sprague Lake.

	<b>Size:</b>	<b>Max. Depth:</b>	<b>Volume:</b>
<b>Fishtrap Lake</b>	202 acres	31 ft	4085 acre feet

**Water Source:** Hog Canyon Creek, groundwater seeps and springs, and limited overland flow.

**Outflow:** Hog Canyon Creek is the outlet stream from Fishtrap Lake. This creek flows year round. Approximately 1 mile below the creek outlet from Fishtrap Lake, Hog Canyon Creek meets Damage Creek. The confluence of these two streams forms Negro Creek.

There is a water control Structure on Fishtrap Lake. The control structure was designed to raise the water level of Fishtrap Lake three feet at maximum function. The design structure is a low elevation concrete dam with a ten-foot horizontal outfall in the center. The outfall falls approximately one foot vertically and is not a fish barrier. 300 meters below this structure is a 10-foot vertical sediment dam that prevents upstream movement of fish.

Water elevations on the lake are controlled with two foot high boards inserted into the outfall section of the upstream water control structure. This water control structure is critical for fish management because it retains a considerable amount of water (approximately 400 acre feet) in the lake allowing for higher numbers of fish to be stocked in the lake.

James Scroggie, Rex Harder and Scott Miller (all reside in Sprague,WA) hold water rights to retain an additional two feet or approximately 400 acre feet of water with this control structure. Department of Ecology supports this water right, but requires that the water control structure, "... retain that amount of water in the lake at the level it attains by March 15 of each calendar year, and no more than the legal two feet (400 acre feet) as dictated by the registered water right."

In summary, all water above 2-foot level entering the lake post March 15 must be passed unimpeded through the water control structure. This ruling is to satisfy downstream senior water rights in the Cow Creek basin (Note: this is a highly contested issue in the local area). WDFW assisted with installing an elevation marker that is maintained and recorded by the Fishtrap Lake Resort operators.

## Management History:

Fishtrap Lake is a popular opening day trout lake for both boat and shore anglers (Figures 1 and 2). There are good launching facilities at both the public access and resort. The Bureau of Land Management owns most of the western shoreline of the lake providing for excellent shore access. This is a favored area for camping, hiking, boating, fishing, hunting and enjoying general outdoor pursuits. Because of its relative isolation from large metropolitan areas, individuals from both eastern and western Washington enjoy using this lake for its many outdoor recreation attributes.

This lake receives a tremendous amount of angling pressure due to its close proximity to Spokane (30 minute drive west of Spokane on Interstate 90). The proportion of carry-over fish in the harvest reflects high pressure (< 5 percent). This lake has the reputation for providing excellent fishing for rainbow trout from 11 to 15 inches with few “trophy” fish in the harvest.



**Figure 1 View of Fishtrap Lake on Opening day 2005**



**Figure 2 Fishtrap Lake Resort, April 2005**

Fishtrap Lake has a long history of piscicide treatments; it was first treated with rotenone in 1958 and again with Toxaphene in 1961. These treatments were targeted at ridding the lake of common carp. No carp have been recorded in the fish population since the 1961 Toxaphene treatment. Don Earnest (WDG Fisheries Biologist) recorded in his 1958 treatment notes; “Fishtrap Lake had been a popular spiny rayed lake in past years. But with the development of good trout fishing in other lakes nearby, it had lost its popularity and was fished very little. It appears to be a fertile body of water and could develop into a fine trout fishery”. The advent of the use of piscicides and trout management in waters surrounding this lake likely resulted in changing the expectations and demands of anglers in the area. To this date, angler demand continues for a productive trout fishery in this lake.

Subsequent to 1961, the lake has been treated with rotenone 6 times: 1969, 1976, 1983, 1989, 1998 and 2003. Most treatments were done to eradicate pumpkinseed sunfish, brown bullhead,

tench, yellow perch and black crappie. With the exception of pumpkinseed sunfish, brown bullhead and tench the other fish are illegally introduced to provide for unwanted panfish fisheries. There are several local anglers that prospect through illegal introductions for a panfish fishery in this lake. Unfortunately our efforts to thwart their ‘ bucket biology’ are met with continued illegal introductions.

*T&E Flora and Fauna:* Professionals from many resource agencies have visited this site countless times during the last 50 years. No known report exists of any threatened or endangered species habitually found in or near these lakes. Occasional visits from both bald and golden eagles occur. Protected species of waterfowl and other birds frequently are found here at times, as well.

### **Current Management Objectives:**

Fishtrap Lake is a lowland lake opener, last Saturday in April to September 30, production fishery. Five fish limit, no size or gear restrictions. Provide 2 to 5 rainbow trout per angler trip with a carryover harvest rate of 5 percent. Fishery should generate a minimum of 25,000 angler-trips per season.

#### **1. Fishery Objectives:**

Species	Type	Category	Fish/Hour	Fish/Angler	Exploit. Rate
Rainbow	Production	Opening Day	2	3 to 5	75% 1 yr cohort
Rainbow	Production	Remainder of season	1	2 to 3	90% 1 yr cohort

**2. Angler use objective** (# angler days): Season – 25,000 angler days

#### **3. Stocking Objectives:**

	Species	Number of Fish Stocked			Planting Month
		Total	/Acre	/Pound	
Year 1	Rainbow	25000	124	≤ 5	March -April
Year 2	Rainbow	50000	248	<100	April-May
Year 3	Rainbow	60000	297	<100	April-May
Year 4	Rainbow	60000	297	<100	April-May
Year 5	Rainbow	60000	297	<100	April-May

**Management Strategies:**

- Plant rainbow trout catchables Spring 2010 and spring fry during successive springs. There should be limited need for catchable rainbow post Spring 2010 until such time as trout recruitment is limited by competitive or predatory interaction with undesirable fishes.
- Check yearling growth; should be ~11 inches on May 1<sup>st</sup>, adjust stocking rate as necessary.
- Harvest 90% of age 1 fish by end of season.
- Monitor all fish species periodically with creel, netting and/or electrofishing.
- Maintain contact with Department of Ecology and water rights holders in regards to water management on the lake.
- Control undesirable species with rotenone when trout survival is inadequate to produce an acceptable fishery.